

REMARKS

The enclosed electronic and paper copies of the Sequence Listing include no new matter that goes beyond the original application as filed, but are supplied as requested by the Examiner. Furthermore, the above amendments, which merely direct the insertion of the Sequence Listing and insertion of sequence identifiers, include no matter that goes beyond the original application as filed. Applicants respectfully submit that the above-identified application is now in compliance with 37 C.F.R. §§ 1.821-1.825 and WIPO Standard ST. 25.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The first of the attached pages is captioned "Version with Markings to Show Changes Made."

Respectfully submitted,  
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# VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Specification:

Paragraph beginning at page 5, line 10, has been amended as follows:

Figure 1 illustrates the nucleotide sequence (~~SEQ ID NO:1~~) (SEQ ID NO:1 and SEQ ID NO:76 for complement strand) and deduced amino acid sequence (SEQ ID NO:2) of caspase-14. The double-stranded nucleotide sequence is shown, with nucleotide position numbers shown on the left and right sides. The encoded amino acids are shown below each row of nucleotides, with stop codons designated by an asterisk. The start codon, which is shown at nucleotide positions 61 to 63, was identified based on the presence of a stop codon upstream of this position (nucleotide positions 49 to 51). Amino acid position numbers are shown on the right side of the sequence, with the letter "a" shown on the left side of the amino acid sequence and the initial methionine designated position 1. The open reading frame encodes caspase-14, which is 257 amino acids in length, and ends with a stop codon at nucleotide positions 832 to 834.

Paragraph beginning at page 5, line 10, has been amended as follows:

Figure 2 illustrates the amino acid sequence analysis and primary structure of caspase-14. Figure 2A shows a colinear alignment of the predicted amino acid sequence of procaspase-14 with the amino acid sequence of 8 other known caspases. Noncontiguous sequences of caspase-14 (~~SEQ ID NOS: \_\_\_\_\_~~) (SEQ ID NOS: 62-68), Mch5 (caspase-8; ~~SEQ ID NOS: \_\_\_\_\_~~ SEQ ID NOS: 48-54), Mch3 (caspase-7; ~~SEQ ID NOS: \_\_\_\_\_~~ SEQ ID NOS: 35-41), Mch2 (caspase-6; ~~SEQ ID NOS: \_\_\_\_\_~~ SEQ ID NOS: 42-47), CPP32 (caspase-3; ~~SEQ ID NOS: \_\_\_\_\_~~ SEQ ID NOS: 27-34), ICE (caspase-1; ~~SEQ ID NOS: \_\_\_\_\_~~ SEQ ID NOS: 21-26), and ICH-1 (~~caspase-2; SEQ ID NOS: \_\_\_\_\_~~) ICH-1 (caspase-2; SEQ ID NOS: 55-61), caspase-11 (SEQ ID NOS: 10-15), caspase-12 (SEQ ID NOS: 16-20) are shown. The amino acid position of the first amino acid shown in the respective proteins is indicated on the left. Figure 2B depicts the primary structure of

procaspase-14 represented by a bar diagram. The active site QACRG (SEQ ID NO:3) pentapeptide and potential aspartate processing sites are indicated.

Paragraph beginning at page 7, line 12, has been amended as follows:

Figure 10 is an identity comparison between the mouse (SEQ ID NO:2) and human (SEQ ID NO:5) caspase-14 polypeptide sequences as described in Example 1. The mouse sequence is represented on the top line and the human sequence is represented on the bottom line.

Paragraph beginning at page 43, line 19, has been amended as follows:

Following this characterization, amplification of a partial human caspase-14 cDNA from a human brain cDNA library was conducted. The set of forward and reverse primers derived from the mouse cDNA sequence of caspase-14 are set forth below:

Forward primer: ATATGATATGTCAGGTGCCCCG (~~SEQ ID NOS:—~~) (SEQ ID NO: 69)

Reverse primer: TTCCGGAGGGTGCTTTGGA (~~SEQ ID NOS:—~~) (SEQ ID NO: 70)

Paragraph beginning at page 43, line 30, has been amended as follows:

For 5' amplification

Reverse primers: CCTGTATGATGTACACCTTGG (~~SEQ ID NOS:—~~) (SEQ ID NO: 71)

AGAGATTCTCCAGCTTGAC (~~SEQ ID NO:—~~) (SEQ ID NO: 72)

ATCTTCTCCCTTGAGGAAG (~~SEQ ID NO:—~~) (SEQ ID NO: 73)

Paragraph beginning at page 44, line 4, has been amended as follows:

For 3' amplification

Forward primers: ATATGATATGTCAGGTGCCCCG (~~SEQ ID NO: —~~) (SEQ ID NO:

74)

CAAGGTGTACATCATA CAGG (~~SEQ ID NO: —~~) (SEQ ID NO:

75)